



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/808,890

03/25/2004

Yasutaka Kanayama

FUJ 20.916

7465

26304

7590

09/01/2009

KATTEN MUCHIN ROSENMAN LLP  
575 MADISON AVENUE  
NEW YORK, NY 10022-2585

EXAMINER

SINGH, HIRDEPAL

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

09/01/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/808,890	<b>Applicant(s)</b> KANAYAMA ET AL.	
	<b>Examiner</b> HIRDEPAL SINGH	<b>Art Unit</b> 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 8-10 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/10/2009</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is in response to the request for continued examination filed on June 24, 2009. Claims 1-11 are pending and have been considered below.

### ***Response to Arguments***

2. In view of the amendment filed June 24, 2009, the objection to the claims is withdrawn.

3. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunne et al. (US 2003/0152152) in view of Koistinen (US 7,136,375) further in view of Tseng et al. (US 6,172,974).

### **Regarding claims 5 and 7:**

Dunne et al discloses a data transmission system communicating between a first terminal transmitting second data formed by a second encoding system, and a second

Art Unit: 2611

terminal for receiving information transmitted from the first terminal (120,122, 124 in figure 5) comprising;

a first data terminal for inputting said second data and outputting first data encoded with a first encoding system (paragraphs 0008-0009) in a first mode and third data multiplexing said second data and said first data in a second mode (paragraph 0031); and

a second data terminal for inputting said first or third data (paragraphs 0008-0009) output and outputting to the second terminal, in the first mode, fifth data formed by encoding said first data input with a second encoding system (paragraph 0011) and also outputting, in the second mode, said second data isolated from said third data, wherein when said second data terminal is in said first mode and said third data is input, a part of said third data where said second data is multiplexed (70 in figure 1) is replaced with the particular data and said particular data is outputted through the encoding thereof with said second encoding system.

Dunne et al discloses all of the subject matter as described above, except for specifically teaching that detecting TFO information included in the first or third data, and first and second operation modes are based on TFO information detected, and based on the detected tandem free operation noise is separated or alleviated.

However, Koistinen in the same field of endeavor discloses a system and method for coding information transmission where TFO information is detected (tandem free information is transmitted, abstract; 614 in figure 4) included in the first or third data, and

Art Unit: 2611

first and second operation modes are based on TFO information detected (column 4, lines 32-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to implement teachings of Koistinen for detecting the transmitted tandem free information to be used by the Codec in Dunne system in order to enable a versatile selection of a way for data communication by extending the Tandem free operation over a packet network.

However, Tseng in the same field of endeavor discloses a system and method for tandem free operation capabilities where tandem free operation is detected and noise is separated or alleviated in the system (column 2, lines 50-65; column 3, lines 16-24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to implement teachings of Tseng for detecting tandem free information for noise alleviation to be used by the Codec in Dunne system in order to enable a versatile selection of a way for data communication by extending the Tandem free operation over a packet network and by identifying capability of system for tandem free operation for improved quality.

6. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunne et al. (US 2003/0152152) in view of Sebire et al. (US2004/0120302) further in view of Koistinen (US 7,136,375).

**Regarding claim 1:**

Dunne et al discloses a data processing method for inputting data, the input data including one of a first data and a third data (paragraph 0008), the first data formed by encoding a signal with a first encoding system, and the third data formed by multiplexing second data formed by encoding the signal with a second encoding system and said first data (abstract; paragraphs 0008-0009 “ first data is formed by first enhancement signal and third data is formed based on the third analyzer signal”; see figure 1), the data processing method outputting fourth data, the data processing method comprising the steps of:

providing a first mode (15 in figure 1) for inputting the first data, encoding the input data with the second encoding system and outputting the encoded input data as the fourth data (paragraph 0011, especially last 14 lines);

providing a second mode (paragraphs 0011 and 0026) for inputting the third data, isolating the second data and outputting the second data as the fourth data (paragraph 0030).

Dunne et al discloses all of the subject matter as described above and further discloses replacing a part of the third data where the second data is multiplexed with a particular data (paragraphs 0083-0086; and clearly stated in claim 6) encoding the input data including the replaced part with the second encoding system and outputting the encoded data (paragraphs 0021, 0024, 0030 and 0032) as the fourth data, except for specifically teaching that the method providing a third mode for inputting the third data; and detecting TFO information included in the first or third data, and first and second operation modes are based on TFO information detected.

However, Sebire et al in the same field of endeavor discloses a system and method where a method providing a third mode (abstract; paragraph 0041) for inputting the third data.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to input third data formed by multiplexing second data and first data and encoding the decoded data and outputting the data in order to get the quality of data signal with minimal degradation as the compressed signal is enhanced.

However, Koistinen in the same field of endeavor discloses a system and method for coding information transmission where TFO information is detected (tandem free information is transmitted, abstract; 614 in figure 4) included in the first or third data, and first and second operation modes are based on TFO information detected (column 4, lines 32-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to implement teachings of Koistinen for detecting the transmitted tandem free information to be used by the Codec in Dunne system in order to enable a versatile selection of a way for data communication by extending the Tandem free operation over a packet network.

**Regarding claim 2:**

Dunne et al discloses all of the subject matter as described above and further discloses the steps of:

determining if the input data is the first data or the third data (paragraphs 0008 and 0028); and

determining whether to process the input data in the second mode or the third mode when the input data is the third data (paragraphs 0029 and 0031-0032).

Dunne et al discloses all of the subject matter as described above except for specifically teaching that the method includes a third mode.

However, Sebire et al in the same field of endeavor discloses a system and method where a method providing a third mode (abstract; paragraph 0041) for inputting the third data.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to input third data formed by multiplexing second data and first data and encoding the decoded data and outputting the data in order to get the quality of data signal with minimal degradation as the compressed signal is enhanced.

**Regarding claim 3:**

Dunne et al discloses all of the subject matter as described above and further discloses that the first encoding system includes PCM (paragraphs 0005 and 0021) and the signal is an analog signal.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dunne et al. (US 2003/0152152) in view of Kapanen et al. (US 6,850,883) further in view of Koistinen (US 7,136,375).

**Regarding claim 6:**

Dunne et al discloses a data transmission system communicating between a first terminal transmitting second data formed by a second encoding system, and a second



Art Unit: 2611

terminal (120,122, 124 in figure 5) for receiving information transmitted from the first terminal comprising;

a first data terminal for inputting said second data and outputting first data encoded with a first encoding system in a first mode (paragraphs 0008-0009), and also outputting third data multiplexing said second data and said first data in a second mode (paragraph 0031);

a second data terminal for inputting said first or third data (paragraphs 0008-0009), and outputting to said second terminal, in a first mode, fourth data formed by encoding said first data with a second encoding system (paragraphs 0008-0009) and also outputting said second data isolated from said third data in a second mode, wherein when an operation mode is to be switched to said first mode or said second mode (17 and 18 in figure 1), the data for resetting a data processor to decode the data output with said second encoding system is added to said fourth data and then output before said mode switching operation (70 in figure 1).

Dunne et al discloses all of the subject matter as described above including the preamble portion which doesn't have same patentable weight as positive limitations in the body of the claim, except for specifically teaching that a signal for resetting data processor for decoding data output; and detecting TFO information included in the first or third data and first and second operation modes are based on TFO information detected.

However, Kapanen in the same field of endeavor discloses a decoding method speech encoding processing system where a signal for resetting data processor for decoding data output (abstract; column 6, lines 64-67; column 7, lines 1-8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to implement the teaching of Kapanen to reset the data processor for decoding data with a decoding system before switching to another mode in the Dunne system to make the switching between tandem and tandem free operation accordingly as required with resetting and synchronizing quantizing to advantageously use tandem free operation system by providing predictive and generally non stateless encoders.

However, Koistinen in the same field of endeavor discloses a system and method for coding information transmission where TFO information is detected (tandem free in formation is transmitted, abstract; 614 in figure 4) included in the first or third data, and first and second operation modes are based on TFO information detected (column 4, lines 32-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to implement teachings of Koistinen for detecting the transmitted tandem free information to be used by the Codec in Dunne system in order to enable a versatile selection of a way for data communication by extending the Tandem free operation over a packet network.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dunne et al. (US 2003/0152152) in view of Kapanen et al. (US 6,850,883) further in view of

Art Unit: 2611

Koistinen (US 7,136,375) as applied to claim 8 above, and further in view of Sebire et al. (US2004/0120302).

**Regarding claim 11:**

Dunne et al discloses all of the subject matter as described above and further discloses that the input starting position (paragraphs 0072 and 0089) of said third data determined as input is obtained from the signal to be transmitted before said third data is transmitted.

***Allowable Subject Matter***

9. Claims 4 and 8-10 are allowed.

10. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record discloses a system and method for tandem free operation that detects TFO and process the data by detecting if the input data is the first data or the third data determining whether to transition from a first operation mode to a second operation mode for coding the input data, but the prior art fails to disclose the system includes the first operation mode includes, when the input data is the third data, replacing a part of the third data where the second data is multiplexed with a particular data pattern, encoding the input data including the replaced part with the second encoding system, and outputting the encoded data as the fourth data, and the second operation mode includes, when the input data is the third data, isolating the second data, performing a noise alleviation process on the second data, and outputting the second data as the fourth data.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HIRDEPAL SINGH whose telephone number is (571) 270-1688. The examiner can normally be reached on Mon-Fri (Alternate Friday Off) 8:30AM-6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. S./  
Examiner, Art Unit 2611  
/Shuwang Liu/  
Supervisory Patent Examiner, Art Unit 2611

Application/Control Number: 10/808,890  
Art Unit: 2611

Page 12